# CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER: 21-375

## **CHEMISTRY REVIEW(S)**



## NDA 21-375

### Alavert<sup>TM</sup> Tablets

## Wyeth Consumer Healthcare

Chong Ho Kim, Ph.D.

**Division of Pulmonary and Allergy Drug Products** 



## **Chemistry Review Data Sheet**

- 1. NDA #: 21-375
- 2. REVIEW #: 3
- 3. REVIEW DATE: 06-November-2002
- 4. REVIEWER: Chong Ho Kim, Ph.D.

#### 5. PREVIOUS DOCUMENTS:

Previous Documents	Document Date
Original	23-AUG-01
Amendment[BL]	21-FEB-02
Amendment[BC]	08-MAR-02
Amendment[BC]	13-MAY-02
Amendment[BL]	24-MAY-02
Amendment[BC]	31-MAY-02
Amendment[AZ]	19-JUL-02

#### 6. SUBMISSION(S) BEING REVIEWED:

Submission(s) Reviewed	Document Date
Amendment[AZ]	14-OCT-02
Amendment[BZ]	31-OCT-02
Amendment[BC]	06-NOV-02

#### 7. NAME & ADDRESS OF APPLICANT:

Name: Whitehall-Robins Healthcare

Address: 5 Giralda Farms
Madison, NJ 07940

Representati Ms. Sharon C. Heddish

Telephone: 973-660-5753; Fax: 973-660-7187



- 8. DRUG PRODUCT NAME/CODE/TYPE:
  - a) Proprietary Name:

Alavert™ Tablets (OPDRA consult

pending)

b) Nonproprietary Name (USAN):

Loratadine 10 mg Orally Disintegrating

Tablet

- c) Code Name/#:
- d) Chem. Type/Submission Priority:

• Chem. Type:

3

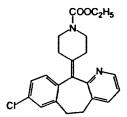
Submission Priority:

- 9. LEGAL BASIS FOR SUBMISSION: 505(b) (2) Application
- 10. PHARMACOL. CATEGORY: Antihistamine
- 11. DOSAGE FORM: Orally Disintegrating Tablet
- 12. STRENGTH/POTENCY: 10 mg
- 13. ROUTE OF ADMINISTRATION: Oral
- 14. Rx/OTC DISPENSED: \_\_\_Rx \_X OTC
- 15. SPOTS (SPECIAL PRODUCTS ON-LINE TRACKING SYSTEM)[Note20]:

\_\_\_\_SPOTS product – Form Completed

X Not a SPOTS product

16. CHEMICAL NAME, STRUCTURAL FORMULA, MOLECULAR FORMULA, MOLECULAR WEIGHT:



Loratadine

Ethyl 4-(8-chloro-5,6-dihydro-11 H-benzo[5,6]-cyclohepta [1,2-b]pyridin-11-ylidene}-1-piperidinecarboxylate





#### Chemistry Review Data Sheet

Chemical Name:

11-[N-(ethoxycarbonyl)-4-piperidylidene]-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]-pyridine
1-Piperidinecarboxylic acid, 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-

ethyl ester

CAS Number:

[79794-75-5]

Molecular Formula:

C22H23ClN2O2

Molecular Weight:

382.89

#### 17. RELATED/SUPPORTING DOCUMENTS:

#### A. Supporting DMFs:

DMF#	ТҮРЕ	HOLDER	ITEM REFERENCED	CODE <sup>1</sup>	STATUS <sup>2</sup>	DATE REVIEW COMPLETED	COMMENTS <sup>3</sup>
	II			3	Adequate <sup>®</sup>	3/28/02	See below
	II			3	Adequate#	2/11/02	See below
	111			3	Adequate*	2/26/02	See below
		`-	Electric Percentage of the Per				
	Ш			3	Adequate**	8/24/00	See below

<sup>&</sup>lt;sup>1</sup> Action codes for DMF Table:

1 – DMF Reviewed.

Other codes indicate why the DMF was not reviewed, as follows:

- 2-Type 1 DMF
- 3 Reviewed previously and no revision since last review
- 4 Sufficient information in application
- 5 Authority to reference not granted
- 6 DMF not available
- 7 Other (explain under "Comments")

@	Dr. Trimmer reviewed the most recent amendment dated February 22, 2002 with regard to ANDA
	#75-822 and found it adequate.

#	Dr. Klein review	ed the DMF for	with regard to IND	
		and found it adequate.		

<sup>&</sup>lt;sup>2</sup> Adequate, Inadequate, or N/A (There is enough data in the application, therefore the DMF did not need to be reviewed)

<sup>&</sup>lt;sup>3</sup> Include reference to location in most recent CMC review





#### Chemistry Review Data Sheet

*	Dr. Shaw reviewed the DMF with regard to Prilosec Capsules (NDA 19-810) and found is
	adequate (review dated 2/26/02).

**	Dr. Fr	rankewich reviewed the DMF	with regard to
		and found it adequate (review dated 8/24/00).	

#### **B.** Other Supporting Documents:

Doc#	OWNER	ITEM REFERENCED	STATUS	DATE REVIEW COMPLETED	COMMENTS

#### C. Related Documents:

DOCUMENT	APPLICATION NUMBER	OWNER	DESCRIPTION/COMMENT
ANDA			

#### 18. CONSULTS/CMC-RELATED REVIEWS:

CONSULTS	SUBJECT	DATE FORWARDED	STATUS/ REVIEWER	COMMENTS
Biometrics	1			
EES	ds and dp sites	2/13/02	acceptable (5/9/02)	
Pharm/Tox				
Biopharm	dissolution		Acceptable	applicant's newest proposal met the recommendation.
LNC	N/A			
Methods Validation				* To be requested
OPDRA	acceptability of the trade name		Pending	
EA	exclusion requested		acceptable/5- 23-02	
Microbiology	N/A			

<sup>\*</sup>Applicant has provided three copies of method validation package. (Amendment dated November 6, 2002)



**Executive Summary Section** 

## The Chemistry Review for NDA 21-375

### The Executive Summary

#### I. Recommendations

A. Recommendation and Conclusion on Approvability

This NDA may be approved from a CMC standpoint.

B. Recommendation on Phase 4 (Post-Marketing) Commitments, Agreements, and/or Risk Management Steps, if Approvable

None

#### II. Summary of Chemistry Assessments

#### A. Description of the Drug Product(s) and Drug Substance(s)

- This application is requesting a switch to OTC status for the allergic rhinitis indication and not the indication.
- Applicant stated that the loratadine orally disintegrating tablet formulation is manufactured and tested as described in ESI Lederle ANDA 75-822, which is under review.
- 3). Up to 18 months room temperature stability data and 3 months accelerated stability data on two production-scale batches are provided in the original application. However, updated stability data (24 months at room temperature and 6 months at accelerated condition) were provided in the amendment dated March 8, 2002. With this sufficient actual stability data in hand, a biometrics consult on the proposed 24 months expiration dating period was not necessary.
- The test methods for drug substance and for the drug product are acceptable.
- 5). The loratadine drug substance is manufactured by

  at their

  facility. The DMF is adequate to support the current NDA.
- 6). The formulation of loratadine 10 mg orally disintegrating tablet is slightly different from the referenced drug.

  Most excipients are compendial excipients except the natural and artificial mint flavor \_\_\_\_\_ The drug product will be marketed in blister packaging.
- All drug product manufacturing, packaging and testing facilities have an acceptable EER status.

### CNED

#### **CHEMISTRY REVIEW**



#### **Executive Summary Section**

#### B. Description of How the Drug Product is Intended to be Used

The drug product is orally disintegrating tablets. It will be used for the treatment of seasonal allergic rhinitis symptoms.

#### C. Basis for Approvability or Not-Approval Recommendation

The application may be approved from a CMC standpoint.

#### III. Administrative

#### A. Reviewer's Signature

#### **B.** Endorsement Block

ChemistName/Date: ChemistryTeamLeaderName/Date: ProjectManagerName/Date: Chong Ho Kim/ 06-NOV-2002 Guirag Poochikian/ Anthony Zeccola/

#### C. CC Block

Orig. NDA #21-375 HFD-570/Division File HFD-570/CHKim HFD-570/GPoochikian HFD-570/AZeccola R/D Init. by:

Doc: n21-375r3.N06

page(s) have been removed because it contains trade secret and/or confidential information that is not disclosable.

This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

Chong-Ho Kim 11/7/02 03:24:38 PM CHEMIST

Guiragos Poochikian 11/7/02 04:32:02 PM CHEMIST



## **NDA 21-375**

### Alavert<sup>TM</sup> Tablets

## Wyeth Consumer Healthcare

Chong Ho Kim, Ph.D.

**Division of Pulmonary and Allergy Drug Products** 



## **Chemistry Review Data Sheet**

- 1. NDA #: 21-375
- 2. REVIEW #: 2
- 3. REVIEW DATE: 12-SEPTEMBER-2002
- 4. REVIEWER: Chong Ho Kim, Ph.D.

#### 5. PREVIOUS DOCUMENTS:

Previous Documents	Document Date
Original	23-AUG-01
Amendment[BL]	21-FEB-02
Amendment[BC]	08-MAR-02
Amendment[BC]	13-MAY-02
Amendment[BL]	24-MAY-02
Amendment[BC]	31-MAY-02

#### 6. SUBMISSION(S) BEING REVIEWED:

Submission(s)	Reviewed
Amendment[A	

Document Date 19-JUL-02

#### 7. NAME & ADDRESS OF APPLICANT:

Name: Whitehall-Robins Healthcare

Address: 5 Giralda Farms

Address: Madison, NJ 07940

Representati ve: Ms. Sharon C. Heddish

Telephone: 973-660-5753; Fax: 973-660-7187





#### Chemistry Review Data Sheet

- 8. DRUG PRODUCT NAME/CODE/TYPE:
  - a) Proprietary Name:

Alavert™ Tablets (OPDRA consult

pending)

b) Nonproprietary Name (USAN):

Loratadine 10 mg Orally Disintegrating

Tablet

- c) Code Name/#:
- d) Chem. Type/Submission Priority:

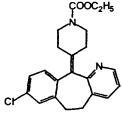
• Chem. Type:

3

- Submission Priority:
- 9. LEGAL BASIS FOR SUBMISSION: 505 (b) (2) Application
- 10. PHARMACOL. CATEGORY: Antihistamine
- 11. DOSAGE FORM: Orally Disintegrating Tablet
- 12. STRENGTH/POTENCY: 10 mg
- 13. ROUTE OF ADMINISTRATION: Oral
- 14. Rx/OTC DISPENSED: Rx X OTC
- 15. <u>SPOTS (SPECIAL PRODUCTS ON-LINE TRACKING SYSTEM)[Note20]:</u>
  \_\_\_\_SPOTS product Form Completed

X Not a SPOTS product

16. CHEMICAL NAME, STRUCTURAL FORMULA, MOLECULAR FORMULA, MOLECULAR WEIGHT:



Loratadine

Ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]-cyclohepta [1,2-b]pyridin-11-ylidene)-1-piperidinecarboxylate

Chemical Name:

11-[N-(ethoxycarbonyl)-4-piperidylidene]-8-chloro-

6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]-pyridine

1-Piperidinecarboxylic acid, 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-ethyl ester

CAS Number:

[79794-75-5]

Molecular Formula:

 $C_{22}H_{23}ClN_2O_2$ 

Molecular Weight:

382.89

#### 17. RELATED/SUPPORTING DOCUMENTS:

#### A. Supporting DMFs:

DMF#	TYPE	HOLDER	ITEM REFERENCED	CODE <sup>1</sup>	STATUS <sup>2</sup>	DATE REVIEW COMPLETED	COMMENTS <sup>3</sup>
	II			3	Adequate <sup>@</sup>	3/28/02	See below
-	II			3	Adequate#	2/11/02	See below
	III			3	Adequate*	2/26/02	See below
	III			3	Adequate**	8/24/00	See below

<sup>&</sup>lt;sup>1</sup> Action codes for DMF Table:

1 – DMF Reviewed.

Other codes indicate why the DMF was not reviewed, as follows:

- 2-Type 1 DMF
- 3 Reviewed previously and no revision since last review
- 4 Sufficient information in application
- 5 Authority to reference not granted
- 6 DMF not available
- 7 Other (explain under "Comments")

@	Dr. Trimmer reviewed the most recent amendment dated February 22, 2002 with regard to ANDA
	#75-822 and found it adequate.

#	Dr. Klein reviewed the DMF for	with regard to IND	
	and found it ac	lequate.	

<sup>&</sup>lt;sup>2</sup> Adequate, Inadequate, or N/A (There is enough data in the application, therefore the DMF did not need to be reviewed)

<sup>&</sup>lt;sup>3</sup> Include reference to location in most recent CMC review

<sup>\*</sup> Dr. Shaw reviewed the DMF with regard to Prilosec Capsules (NDA 19-810) and found it adequate (review dated 2/26/02).





#### Chemistry Review Data Sheet

**	Dr. Frankewich reviewed the DMF	with regard to
	and found it adequate (review dated 8/24/00).	

#### **B.** Other Supporting Documents:

Doc#	OWNER	ITEM REFERENCED	STATUS	DATE REVIEW COMPLETED	COMMENTS
				·	

#### C. Related Documents:

DOCUMENT	APPLICATION NUMBER	OWNER	DESCRIPTION/COMMENT
ANDA			

#### 18. CONSULTS/CMC-RELATED REVIEWS:

CONSULTS	SUBJECT	DATE FORWARDED	STATUS/ REVIEWER	COMMENTS
Biometrics				
EES	ds and dp sites	2/13/02	acceptable (5/9/02)	
Pharm/Tox				
Biopharm	dissolution		Acceptable	applicant's newest proposal met the recommendation.
LNC	N/A			
Methods Validation				•
OPDRA	acceptability of the trade name		Pending	
EA	exclusion requested		acceptable/5- 23-02	
Microbiology	N/A			

<sup>\*</sup>Applicant should provide three copies of method validation package, once we reach agreement on the specifications.



#### **Executive Summary Section**

## The Chemistry Review for NDA 21-375

#### The Executive Summary

#### I. Recommendations

A. Recommendation and Conclusion on Approvability

Approvable from a CMC standpoint.

B. Recommendation on Phase 4 (Post-Marketing) Commitments, Agreements, and/or Risk Management Steps, if Approvable

None

#### II. Summary of Chemistry Assessments

#### A. Description of the Drug Product(s) and Drug Substance(s)

- 1). This application is requesting a switch to OTC status for the allergic rhinitis indication and not the \_\_\_\_\_\_ indication.
- 2). Applicant stated that the loratadine orally disintegrating tablet formulation is manufactured and tested as described in ESI Lederle ANDA 75-822, which is under review.
- 3). Up to 18 months room temperature stability data and 3 months accelerated stability data on two production-scale batches are provided in the original application. However, updated stability data (24 months at room temperature and 6 months at accelerated condition) were provided in the amendment dated March 8, 2002. With this sufficient actual stability data in hand, a biometrics consult on the proposed 24 months expiration dating period was not necessary.
- 4). The test methods for drug substance and for the drug product are acceptable. However, no agreement is reached for specifications. Applicant should provide new copies of method validation packages, once we reach agreement on the specifications.
- 5). The loratadine drug substance is manufactured by \_\_\_\_\_ at their \_\_\_\_ facility. The DMF is adequate to support the current NDA.
- 7). All drug product manufacturing, packaging and testing facilities have an acceptable EER



#### **Executive Summary Section**

status.

#### B. Description of How the Drug Product is Intended to be Used

The drug product is orally disintegrating tablets. It will be used for the treatment seasonal allergic rhinitis symptoms.

#### C. Basis for Approvability or Not-Approval Recommendation

The application is approvable. However, the pending deficiencies listed at the end of this review should be addressed to gain approval.

#### III. Administrative

#### A. Reviewer's Signature

#### **B.** Endorsement Block

ChemistName/Date:
ChemistryTeamLeaderName/Date:
ProjectManagerName/Date:

Chong Ho Kim/ 12-SEP-2002 Guirag Poochikian/ Anthony Zeccola/

#### C. CC Block

Orig. NDA #21-375 HFD-570/Division File HFD-570/CHKim HFD-570/GPoochikian HFD-570/AZeccola R/D Init. by:

Doc: n21-375r2.913

page(s) have been removed because it contains trade secret and/or confidential information that is not disclosable.

This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

Chong-Ho Kim 9/16/02 09:09:37 AM CHEMIST

Guiragos Poochikian 9/16/02 09:21:19 AM CHEMIST

## NDA 21-375

## Alavert<sup>TM</sup> Tablets

## White-Robins Healthcare

Chong Ho Kim, Ph.D.

Division of Pulmonary and Allergy Drug Products





## **Table of Contents**

1 2	Table of Contents	2
C	Chemistry Review Data Sheet	3
TI	The Executive Summary	7
I.	I. Recommendations	7
	A. Recommendation and Conclusion on Approvability	7
	B. Recommendation on Phase 4 (Post-Marketing) Commitments, Agre Management Steps, if Approvable	
II.	II. Summary of Chemistry Assessments	7
	A. Description of the Drug Product(s) and Drug Substance(s)	7
	B. Description of How the Drug Product is Intended to be Used	8
	C. Basis for Approvability or Not-Approval Recommendation	8
Ш	III. Administrative	8
	A. Reviewer's Signature	8
	B. Endorsement Block	8
	C. CC Block	8
C	Chemistry Assessment	9
I.	I. Review Of Common Technical Document-Quality (Ctd-Q) Modul	le 3.2: Body Of Data 9
	S DRUG SUBSTANCE [Name, Manufacturer]	9
	P DRUG PRODUCT [Name, Dosage form]	16
	A APPENDICES	39
	R REGIONAL INFORMATION	39
II.	II. Review Of Common Technical Document-Quality (Ctd-Q) Modul	le 139
	A. Labeling & Package Insert	39
	B. Environmental Assessment Or Claim Of Categorical Exclusion	39
Ш	III List Of Deficiencies To Re Communicated	11



## **Chemistry Review Data Sheet**

- 1. NDA #: 21-375
- 2. REVIEW #: 1
- 3. REVIEW DATE: 30-MAY-2002
- 4. REVIEWER: Chong Ho Kim, Ph.D.
- 5. PREVIOUS DOCUMENTS:

**Previous Documents** 

**Document Date** 

#### 6. SUBMISSION(S) BEING REVIEWED:

Submission(s) Reviewed	Document Date
Original	23-AUG-01
Amendment[BL]	21-FEB-02
Amendment[BC]	08-MAR-02
Amendment[BC]	13-MAY-02
Amendment[BL]	24-MAY-02
Amendment[BC]	31-MAY-02

#### 7. NAME & ADDRESS OF APPLICANT:

Name: Whitehall-Robins Healthcare

Address: 5 Giralda Farms Madison, NJ 07940

Representati Ms. Sharon C. Heddish

Telephone: 973-660-5753; Fax: 973-660-7187





#### Chemistry Review Data Sheet

- 8. DRUG PRODUCT NAME/CODE/TYPE:
  - a) Proprietary Name:

Alavert $^{TM}$  Tablets (OPDRA consult

pending)

b) Nonproprietary Name (USAN):

Loratadine 10 mg Orally Disintegrating

Tablet

- c) Code Name/#:
- d) Chem. Type/Submission Priority:

• Chem. Type:

3

- Submission Priority: S
- 9. LEGAL BASIS FOR SUBMISSION: 505(b)(2) Application
- 10. PHARMACOL. CATEGORY: Antihistamine
- 11. DOSAGE FORM: Orally Disintegrating Tablet
- 12. STRENGTH/POTENCY: 1

10 mg

13. ROUTE OF ADMINISTRATION:

Oral

14. Rx/OTC DISPENSED: \_\_\_Rx

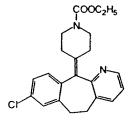
tx <u>X</u> OTC

15. SPOTS (SPECIAL PRODUCTS ON-LINE TRACKING SYSTEM)[Note21]:

\_\_\_\_SPOTS product – Form Completed

X Not a SPOTS product

16. CHEMICAL NAME, STRUCTURAL FORMULA, MOLECULAR FORMULA, MOLECULAR WEIGHT:



Loratadine

Ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]-cyclohepta I1.2-b]pvridin-11-vlidene)-1-piperidinecarboxylate

Chemical Name:

11-[N-(ethoxycarbonyl)-4-piperidylidene]-8-chloro-

6,11-dihydro-5H-benzo[5,6] cyclohepta[1,2-b]-pyridine



#### Chemistry Review Data Sheet

1-Piperidinecarboxylic acid, 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-ethyl ester

CAS Number:

[79794-75-5]

Molecular Formula:

 $C_{22}H_{23}ClN_2O_2$ 

Molecular Weight:

382.89

#### 17. RELATED/SUPPORTING DOCUMENTS:

#### A. Supporting DMFs:

DMF#	ТҮРЕ	HOLDER	ITEM REFERENCED	CODE <sup>1</sup>	STATUS <sup>2</sup>	DATE REVIEW COMPLETED	COMMENTS <sup>3</sup>
	II			3	Adequate <sup>®</sup>	3/28/02	See below
	II			3	Adequate*	2/11/02	See below
	111		-	3	Adequate*	2/26/02	See below
_				<u> </u>  -			
	III			3	Adequate**	8/24/00	See below

<sup>&</sup>lt;sup>1</sup> Action codes for DMF Table:

1 - DMF Reviewed.

Other codes indicate why the DMF was not reviewed, as follows:

- 2-Type 1 DMF
- 3 Reviewed previously and no revision since last review
- 4 Sufficient information in application
- 5 Authority to reference not granted
- 6 DMF not available
- 7 Other (explain under "Comments")

@ .	Dr. Trimmer reviewed the most recent amendment dated February 22, 2002 with regard to ANDA #75-822 and found it adequate.
#	Dr. Klein reviewed the DMF for with regard to IND and found it adequate.

\* Dr. Shaw reviewed the DMF with regard to Prilosec Capsules (NDA 19-810) and found it adequate (review dated 2/26/02).

<sup>&</sup>lt;sup>2</sup> Adequate, Inadequate, or N/A (There is enough data in the application, therefore the DMF did not need to be reviewed)

<sup>&</sup>lt;sup>3</sup> Include reference to location in most recent CMC review





### Chemistry Review Data Sheet

**	Dr. Frankewich reviewed the DMF (	with regard to
	and found it adequate (review dated 8/24/00).	

#### **B. Other Supporting Documents:**

Doc#	OWNER	ITEM REFERENCED	STATUS	DATE REVIEW COMPLETED	COMMENTS

#### C. Related Documents:

DOCUMENT	OCUMENT APPLICATION NUMBER		DESCRIPTION/COMMENT		
ANDA					

#### 18. CONSULTS/CMC-RELATED REVIEWS:

CONSULTS	SUBJECT	DATE FORWARDED	STATUS/ REVIEWER	COMMENTS
Biometrics				
EES	ds and dp sites	2/13/02	acceptable (5/9/02)	
Phann/Tox	N/A			
Biopharm	dissolution		acceptable	applicant's newest proposal met the recommendation.
LNC	N/A			
Methods Validation	1			•
OPDRA	acceptability of the trade name		pending	
EA	exclusion requested		acceptable/ 5-23-02	
Microbiology	N/A			

<sup>\*</sup>Submission of three copies of method validation package was requested (5/28/02).



**Executive Summary Section** 

## The Chemistry Review for NDA 21-375

### The Executive Summary

#### I. Recommendations

A. Recommendation and Conclusion on Approvability

Approvable from a CMC standpoint.

B. Recommendation on Phase 4 (Post-Marketing) Commitments, Agreements, and/or Risk Management Steps, if Approvable

None

#### II. Summary of Chemistry Assessments

- A. Description of the Drug Product(s) and Drug Substance(s)
  - 1). This application is requesting a switch to OTC status for the allergic rhinitis indication and not the indication.
  - Applicant stated that the loratadine orally disintegrating tablet formulation is manufactured and tested as described in ESI Lederle ANDA 75-822, which is under review.
  - 3). Up to 18 months room temperature stability data and 3 months accelerated stability data on two production-scale batches are provided in the original application. However, updated stability data (24 months at room temperature and 6 months at accelerated condition) were provided in the amendment dated March 8, 2002. With this sufficient actual stability data in hand, a biometrics consult on the proposed 24 months expiration dating period was not necessary.
  - 4). The test methods for drug substance and for the drug product are acceptable. New copies of method validation packages were requested on May 28, 2003.

  - 6). The formulation of loratadine 10 mg orally disintegrating tablet is slightly different from the referenced drug.

    Most excipients are compendial excipients except the natural and artificial mint flavor \_\_\_\_\_ The drug product will be marketed in blister packaging.
  - 7). All drug product manufacturing, packaging and testing facilities have an acceptable EER status.

## ಡುಡಾ

#### **CHEMISTRY REVIEW**



#### **Executive Summary Section**

#### B. Description of How the Drug Product is Intended to be Used

The drug product is orally disintegrating tablets. It will be used, for the treatment seasonal allergic rhinitis symptoms.

#### C. Basis for Approvability or Not-Approval Recommendation

The application is approvable. However, the pending deficiencies listed at the end of the review should be addressed to gain approval.

#### III. Administrative

#### A. Reviewer's Signature

#### **B.** Endorsement Block

ChemistName/Date:

Chong Ho Kim/ 06-JUN-2002

ChemistryTeamLeaderName/Date:

Guirag Poochikian/

ProjectManagerName/Date:

Anthony Zeccola/

#### C. CC Block

Orig. NDA #21-375 HFD-570/Division File HFD-570/CHKim HFD-570/GPoochikian HFD-570/AZeccola R/D Init. by:

Doc: n21-375r1f.606

page(s) have been removed because it contains trade secret and/or confidential information that is not disclosable.

This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

Chong-Ho Kim 6/10/02 10:35:21 AM CHEMIST

Guiragos Poochikian 6/10/02 10:41:35 AM CHEMIST

#### Page 1 of 🔏

## FDA CDER EES

	E	STABLISHMENT DETAI	EVALUATION I	REQUEST		
Fication: NDA 2 Stamp: 04-SEP Regulatory Due: 04-JUL Applicant: WYETH CONS 5 GIRALDA FAR MADISON, NJ Priority: 3S Org Code: 570		-SEP-2001 -JUL-2002 5 FARMS		Goal: ct Goal: Name: Name: c Name: Form:	ALAVERT (LORATADINE HCL) 10MG TABLETS LORATADINE HCL (TABLET)	
Application Co	mment:					
FDA Contacts:	A. ZECCOL C. KIM G. POOCHI	(H KIAN (H	IFD-550) IFD-570) IFD-570)	301-82 301-82	7-1050 , Tea	ject Manager iew Chemist m Leader
	endation:	ACCEPTABLE	on 09-MAY-	2002by S. F		
Establishment:	·		FEI			
( DMF No: Responsibiliti	es:		AADA:			
Profile:	TCM			OAI Status:	NONE	
Estab. Comment	:			·	· · · · · · · · · · · · · · · · · · ·	
Milestone Nam	e Date	Туре	Insp. Date	Decisi	on & Reason	Creator
SUBMITTED TO	OC 13-FEB	-2002	+			KIMCH

SUBMITTED TO DO 13-FEB-2002 10D DO RECOMMENDATION 23-APR-2002 DAMBROGIOJ ACCEPTABLE STHOMA BASED ON FILE REVIEW

A PRE-APPROVAL AND CGMP INSPECTION WAS CONDUCTED AT THE ABOVE NAMED ESTABLISHMENTS TO EVALUATE THE FIRM'S CAPABILITY AS A \_\_\_\_ SITE FOR LORATADINE TABLETS. THE INSPECTIONS WERE CONDUCTED FROM 07/11 - 08/09/2000 AND COVERED THE "TCM" AND "CTL" PROFILE CLASSES. A 5-ITEM FDA-483, INSPECTIONAL OBSERVATIONS, WAS ISSUED DURING THE AUGUST 2000 INSPECTION AND CORRECTIVE ACTION WAS IMPLEMENTED PROMPTLY BY THE FIRM.

BASED ON THE AUGUST 2000 INSPECTIONAL FINDINGS, THE FIRM'S PROMPT CORRECTIVE ACTION OF INSPECTIONAL OBSERVATIONS, AND BECAUSE THE PREVIOUS INSPECTION IS WITHIN THE TWO-YEAR STATUTORY OBLIGATION OF THE FOOD, DRUG & COSMETIC ACT FOR INSPECTION OF DRUG ABLISHMENTS, I AM RECOMMENDING APPROVAL OF NDA 21375 FOR ALAVERT (LORATADINE HCL) 10 TABLETS AT THE DISTRICT LEVEL. PROFILE SAMPLES WILL BE COLLECTED DURING THE NEXT

# FDA CDER EES ESTABLISHMENT EVALUATION REQUEST DETAIL REPORT

SCHEDULED ROUTINE I	INSPECTION OF THE	E FIRM AND FORWARDED T	0	_
OC RECOMMENDATION	23-APR-2002		ACCEPTABLE DISTRICT RECOMMENDATION	
Establishment:		FEI		
		•		
DMF No: Responsibilities:		AADA:		*
Profile:	CTL	IAO	Status: NONE	
Estab. Comment:	301-827-1050)	(on	13-FEB-2002 by C. KIM	(HFD-570)
	Date	Type Insp. Date	Decision & Reason	Creator
SUBMITTED TO OC SUBMITTED TO DO DO RECOMMENDATION	13-FEB-2002	GMР	ACCEPTABLE	KIMCH DAMBROGIOJ STHOMA
EVALUATE THE FIRM THE INSPECTIONS WE PROFILE CLASSES.	S CAPABILITY AS . ERE CONDUCTED FR A 5-ITEM FDA-483	A OM 07/11 - 08/09/2000 , INSPECTIONAL OBSERVA	BASED ON FILE REVIEW  ABOVE NAMED ESTABLISHM  SITE FOR LORATADI  AND COVERED THE "TCM"  ATIONS, WAS ISSUED DURI  ENTED PROMPTLY BY THE F	NE TABLETS. AND "CTL" NG THE
INSPECTIONAL OBSER STATUTORY OBLIGATION ESTABLISHMENTS, I MG TABLETS AT THE	VATIONS, AND BECON OF THE FOOD, AM RECOMMENDING DISTRICT LEVEL.	AUSE THE PREVIOUS INSE DRUG & COSMETIC ACT FO APPROVAL OF NDA 21375	FOR ALAVERT (LORATADIN BE COLLECTED DURING TH	WO-YEAR E HCL) 10
OC RECOMMENDATION	23-APR-2002		ACCEPTABLE DISTRICT RECOMMENDATI	
Establishment:				

The second secon

# FDA CDER EES ESTABLISHMENT EVALUATION REQUEST DETAIL REPORT

DMF No:						
Responsibilities:			AADA	-		
Profile:	CTL			OAI	Status: NONE	
Estab. Comment:	THE SITE HAS BEE	EN DESIG	NATED FOR		(on 09-MAY-2002	
Milestone Name	(HFD-570) 301-82	Туре	Insp. Date		Decision & Reason	
SUBMITTED TO OC OC RECOMMENDATION	09-MAY-2002 09-MAY-2002				ACCEPTABLE BASED ON PROFILE	KIMCH FERGUSONS
Establishment:				-, - <b></b> .		
אייק No: ( ponsibilities:			AADA	: -		
Profile:	CTL			OAI	Status: NONE	
Estab. Comment: Milestone Name	(on	09-MAY-2	2002 by C.	KIM	(HFD-570) 301-827-1050 Decision & Reason	) Creator
SUBMITTED TO OC OC RECOMMENDATION	09-MAY-2002				ACCEPTABLE BASED ON PROFILE	KIMCH
Establishment:						
DMF No: Responsibilities:			AADA	:		
Profile:	CSN			OAI	Status: NONE	
EMilestone Name	Date	Туре	Insp. Dat	e	Decision & Reason	Creator
'BMITTED TO OC RECOMMENDATION	13-FEB-2002 13-FEB-2002				ACCEPTABLE BASED ON PROFILE	KIMCH DAMBROGIOJ